

## **SUBSTITUTE SPECIFICATION**

### **V. Brief Description of the Drawings**

FIG. 1 is a diagram of an exemplary computer system according to the present Invention, linked to a Plan administrator's computer system which is linked to a lender computer system, a put underwriter computer system, a market information vendor or a broker computer system, and a Plan participant computer system.

FIG. 2 is a block diagram presenting an overall view of a representative embodiment of the present invention.

FIG. 3A1 is a columnar depiction of information data fields collected, processed, stored and retrieved by computer system 100.

FIG. 3B is a columnar depiction of information data fields collected, processed, stored and retrieved by computer system 100.

FIG. 3C is a columnar depiction of information data fields collected, processed, stored and retrieved by computer system 100.

FIG. 3D is a columnar depiction of information data fields collected, processed, stored and retrieved by computer system 100.

FIG. 3E is a columnar depiction of information data fields collected, processed, stored and retrieved by computer system 100.

FIG. 3F is a columnar depiction of information data fields collected, processed, stored and retrieved by computer system 100.

FIG. 4 is a block diagram of the periodic update processes of the present Invention.

FIG. 5A is a block diagram of the periodic loan monitoring process of the present Invention.

FIG. 5B is a block diagram of the periodic loan monitoring process of the present Invention.

FIG. 5C is a block diagram of the periodic loan monitoring process of the present Invention.

5                    FIG. 6A is a block diagram of the periodic performance tracking and reporting process of the present Invention.

FIG. 6B is a block diagram of the periodic performance tracking and reporting process of the present Invention.

10                   FIG. 6C is a block diagram of the periodic performance tracking and reporting process of the present Invention.

FIG. 6D is a block diagram of the periodic performance tracking and reporting process of the present Invention.

FIG. 6E is a block diagram of the periodic performance tracking and reporting process of the present Invention.

15                   FIG. 6F is a block diagram of the periodic performance tracking and reporting process of the present Invention.

FIG. 6G is a block diagram of the periodic performance tracking and reporting process of the present Invention.

20                   FIG. 6H is a block diagram of the periodic performance tracking and reporting process of the present Invention.

FIG. 6I is a block diagram of the periodic performance tracking and reporting process of the present Invention.

FIG. 6J is a block diagram of the periodic performance tracking and reporting process of the present Invention.

FIG. 6K is a block diagram of the periodic performance tracking and reporting process of the present Invention.

FIG. 7A is a block diagram of the illustration process of the present invention.

FIG. 7B is a block diagram of the illustration process of the present invention.

5 FIG. 7C is a block diagram of the illustration process of the present invention.

FIG. 7D is a block diagram of the illustration process of the present invention.

## **VI. Detailed Disclosure of a Preferred Embodiment**

The loan monitoring function 10 is useful for implementation of the Plan. The Invention monitor the fair market value of the Plan assets (i.e., stock and if applicable, put contracts) to ensure that there is sufficient collateral to collateralize the Plan loans. Generally, under ERISA a lender must be unrelated to the employer or other "parties in interest" in the transaction. Still, a lender that qualifies under DOL Prohibited Transaction Exemption 75-1, can loan to an ERISA Plan and use the employer's (that is also the plan sponsor) stock as collateral.

For shares owned by a Plan and traded on one of the public exchanges, the Invention obtains and electronically records the fair market value of the Plan's stock periodically (eg each trading day). Also, the system computes and stores the periodic loan balance and the related accrued interest. Accordingly, for each participant in an EBIC program, the system periodically computes a ratio of the participant's loan plus accrued interest divided by the fair market value of the Plan assets. Once computed, the loan to value ratios are sent electronically via modem or internet to the Plan lender, and stored in the computer memory. Based on the Plan, this data can also be provided electronically to the participants, the plan sponsor, and/or the administrator.

Accordingly, with loans made to an EBIC program, each day the lender determines the adequacy of the collateral. Because the loan terms offer the lender the capability to rapidly convert the collateral to cash, it is not necessary for the lender to have loan guarantees from the participant or the Plan sponsor. From the lender perspective, it is important that this information be accurate and timely.

The computer system of the invention tracks stock values through electronic reports from a trading exchange, a brokerage company, or a third party information vendor via modem or the Internet. Most banks do not have systems in place to make daily collateral

adequacy computations. The EBIC computer system independently computes and tracks loan and interest balances. There are two advantages for a lender when the EBIC system performs the loan tracking. First, there is third party "audit" or verification of the bank's loan and interest balances. Second, the bank is not forced to track individual Plan participant accounts. They  
5 can administer each EBIC program as a single loan. Individual Plan participant problem loans are addressed on an exception basis when the EBIC system identifies and reports a participant loan falling below the 50% loan to value ratio specified by Reg. U.

Simply knowing the loan to value ratios does not protect the lender from default. The lender is protected where the loan includes a grant of rights from the Plan to the lender to  
10 convert the collateral. The first conversion right is from stock to a money market fund. The second conversion right is a sale of the collateral and application of the sale proceeds to retire the debt.

A preferred embodiment of these types of loan provisions and the EBIC program monitoring system is as follows. After each periodic computation of the loan to value ratio, the  
15 system creates an electronic record of the loan to value ratio for each participant. Normally, these computations be performed overnight and the reports are delivered electronically via modem or the internet to the lender prior to the opening of business on the next , business day. Where loan to value ratios are equal to or greater than 50%, the system creates a separate exception report. The same report includes a notice to the lender that, pursuant to Reg. U, no  
20 further advances are allowed to the noted Plans. (Of course, Plans not on the report are eligible to receive further loans.)

In addition to the 50% ratio exception report, the system generates electronic reports which catalog loan to value ratios which equal or exceed certain Plan pre-determined trigger ratios (hereafter "Trigger Ratio"). Trigger Ratios are part of the Plan document and the  
25 loan agreement. Once a Trigger Ratio is equaled or exceeded, daily the system sends a

report to the lender, the Plan administrator and the participant. These reports are sent electronically via the internet or a telephone modem. When a Trigger Ratio is met, the lender has rights that are enforceable per the loan agreement without notice to or approval of the Plan, the participant or any other party. At the first Trigger Ratio (e.g., 60%), the participant is sent  
5 a warning that the loan ratios are declining, loans are no longer available since his ratio is greater than 50% and a notice reminding the participant what happens when subsequent Trigger Ratios are met. At the next Trigger Ratio (e.g., 70%) the lender has the right to instruct the Plan administrator that the stock and any other Plan assets are to be sold and re-invested in a money market account. If the final Trigger Ratio (e.g., 80%) is reached, the lender requires  
10 the Plan administrator to liquidate Plan assets sufficient to retire the outstanding debt and any accrued interest owed. Of course, a Plan can be structured with only one or more than three trigger ratios.

With this process, the lender is assured that the collateral always exceeds the loan balance. The system is designed to track and report the Plans that have hit Trigger Ratios  
15 on a daily (or other periodic) basis as required by the lender. Due to the periodic electronic reporting by the invention, a lender is able to act promptly once a Trigger Ratio is reached. Because of this detailed and timely reporting system, the lender's risk of loss is eliminated. With low risk to the lender, Plan loans be available and with attractive interest rates.

In addition to loan monitoring, the invention prepares and provides periodic  
20 historical accounting reports for the Plan sponsor, fiduciary, administrator and participant(s). The Plan administrator uses the system generated information to prepare periodic (e.g., monthly, quarterly, annual) reports for the fiduciary and participants. The system reports include some or all of the following data for a period or periods: stock value(s), changes in stock value(s), number of shares of stock held by a Plan, cost basis of shares held, gains and/or  
25 losses from stock sale(s), dividends received, Plan administrative expense, accrued interest

expense, interest paid, other Plan income, other Plan expenses, contributions received from the sponsor and/or the participant, distributions to a participant, trust capital account beginning and ending balances, put contracts in force, cost basis of put contracts, future put expiration date(s), loan receipts, loan retirements, loan balances, loan to value ratio(s), and trigger

5 ratio(s). Data from the system is transmitted to the ERISA Plan fiduciary and to the administrator to prepare the annual Form 5500 for submission to the Department of Labor, the annual participant Plan report required by ERISA, the annual grantor trust tax return(s) to be filed with Internal Revenue Service and the Form K-1s for each participant to report his items from the Plan for inclusion in his annual tax return(s) . Finally, the Invention system provides  
10 data for the lender to include in its annual report to the Federal Reserve Bank for compliance with Reg. U.

There is a significant tax advantage to a Plan participant when the Plan reports and maximizes long term capital gains versus short term capital gains and ordinary income.

Generally the federal income tax rate on long term capital gains is a maximum of 20% versus  
15 the top ordinary income tax rate of 39.5% for most executives. Also, many states have reduced tax rates applicable to long term capital gains. An advantage of lower tax rates is more money left to spend after tax. The proper tax Planning strategy is to hold stock for long term gain tax treatment. When income taxes are due, incur the lowest tax at the long term capital gains rate of 20%. (Note- until 2010 the federal long term capital gains rate be at a special but,  
20 temporary reduced rate of 15% and maximum ordinary income rates be 35%.)

This invention system computes and tracks all values required for income tax reporting for each Plan participant. This data be accessible to a participant electronically via a modem or the internet. Without this system, proactive tax planning would be difficult if not impossible for a Plan participant..

If a Plan incurs taxable income, the system determines if the participant has made an election to receive a cash distribution from the Plan when a taxable event occurs. This election is made at inception of the Plan and is subject to change by the participant on the anniversary date of the Plan. Also, when drafting the Plan instrument, the company sponsor of the Plan designates the amount that the Plan is allowed to distribute when the Plan realizes taxable gains. Typically, a distribution of 20% of the reported gain be allowed in years prior to the final distribution of plan assets and winding up the Plan with respect to a participant.

Because individual participants make different elections and an individual participant be able to change his election over time, the Invention system computes and stores all Plan data on an individual participant basis. These multiple computations and voluminous data storage are only done economically by a sophisticated computer system

The system monitors and reports the attributes of put options owned by the Plan. At a date prior to the put contract expiration, the system prepares electronic reports for the Plan administrator, the Plan participant, and put underwriter that the contract is due for renewal or requires delivery of the shares due under the put. As noted above, the system also tracks put contract value for purposes of the loan monitoring function.

The illustration system module is supplements functions of monitoring Plan loans and preparing user reports. The illustration system data input is a series of Plan assumptions: age and sex of groups of participants, retirement ages by group, annual contribution amounts by group (by employer and/or by participant), employer matching contribution rates, income tax rates for the employer and the participant, loans as a percentage of plan contributions, loan interest rate(s), annual stock value appreciation rate(s) and/or depreciation rate(s), annual stock dividend rate or amount, put cost and put contract duration. For each participant group, the illustration module forecasts on a periodic basis: employee contributions, employer contributions, loan amounts, stock purchases, stock gains, stock losses, interest expense,



administrative expense, annual income tax items to be reported by participant, participant periodic after-tax cash flow amounts, a Plan termination date, a total gain or loss, a simple accounting rate of return, an internal rate of return, and a present value amount. Also, for each participant group the illustration module forecasts on a periodic basis for the employer-sponsor:

5 the periodic after-tax cash flow cost of plan contributions, the GAAP accounting expense, total after-tax costs and GAAP expense, and the present value of the cost.

Finally, the system compares the performance of the illustrated EBIC program to an illustrated stock option Plan. With a single set of assumption data, the system be to generate an accurate comparison of the EBIC program with a stock option Plan. Alternatively,

10 the system accept a third party illustration of a stock option plan and use that data for a comparison. Since the EBIC is a new program that has never been proposed or employed, potential users insist on having illustrations that demonstrate the performance of the new plan as compared to the long existing stock option alternative.

Referring now to the drawings, and initially FIG. 1, there is set forth a system

15 architecture diagram according to the present invention. A computer system 100 is coupled by a computer-to-computer communication device, such as, for example, an internet server 108 to a plan administrator's computer system 110. In the diagram, the plan administrator's system also serves as the conduit for data transfers to and from other parties of interest, including, a lender company's computer 112, a plan fiduciary's computer 114, a plan sponsor's computer

20 116, a plan participant's computer 118, a brokerage firm computer 120. The plan administrator's connection to these other computers most likely be via an internet server, at an intranet server or modem might also be possible in certain circumstances.

Separate and equally viable embodiments of the present invention would link computers 112, 114, 116, 118, and 120 directly computer 100 in addition to or instead of using

25 computer 110 as a conduit.

According to the separate invention, the computer system 100 is operated by the plan administrator of a funded benefit plan (non-qualified for tax purposes) such as, for example, an EBIC plan. As such, the computer system 100 is external to the computer systems at 110, 112, 114, 116, 118, and 120. The computer system 100 is programmed to receive, process, and store plan event data. This data is then used to prepare historical performance computations and various measures of financial performance. The computer system 100 also uses event data to monitor the adequacy of the loan collateral under the loan agreement and assure compliance with Federal Reserve Bank leading rules. Finally, the computer system 100 permits the user to make assumptions about a hypothetical benefit plan and project its financial consequences. In addition, the computer system 100 can compute the financial results of a traditional non-qualified stock option plan and compare the results to those of a EBIC plan.

Typically, the computer system 100 comprise of a processor, such as an Intel PENTIUM™, memory 2 (e.g. a RAM memory and secondary memory devices such as a UBS jump drive, a CD-ROM drive, etc.) an input device (such as a keyboard 102, mouse and/or trackball) an output device (such as a printer 102 or a computer monitor 106) and an internet server device 108 transmit and to receive data and other communications via the internet (a modem is an alternative transmission device). The computer system 100 also include an operating system such as, for example, the Microsoft Windows XP operating system. Also, the computer system 100 include 4 modules:

a Periodic Updating algorithm 4A, a Loan Monitoring algorithm 5A, a Performance Tracking and Reporting algorithm 6A, and an Illustrating algorithm 7A. The first three modules are programmed to reflect the a specific sponsor's benefit plan design and the fourth module, Illustrating 7A, permits the user to select hypothetical design features to be reflected in the computer system prepared 100 illustration.

FIG. 2 is a block diagram showing the software components 1 as they structure the functionality of the present invention. Certain software components control the operation of and provide the functionality to computer system 100. The current embodiment of the present invention includes four separate process systems which can run simultaneously or separately:

5    Periodic Update Process 4, Loan Monitoring Process 5, Performance Tracking and Reporting Process 6, and Illustrating Process 7.

In general, information transfers to and from computer system 100 and Plan Administrator system 110 (or alternatively between computer system 100 and systems 110, 112, 114, 116, 118, and 120). In the current and preferred embodiment of the invention, the  
10    Plan Administrator 110 is the transferor and recipient of all information to and from computer system 100. (Alternatively, all external systems could be in direct communication with computer system 100.) Accordingly, Plan Administrator 110 collects and transmits to computer system 100, information such as benefit plan census data, actual benefit plan events such as contribution receipts, benefit plan terms such as the availability of plan put contract purchases,  
15    user selected variables such as a net present value (NPV) discount rate and illustration assumptions such as future loan interest rates to include in a forecast of a benefit plan, or a benefit plan and a stock option plan, financial performance(s). Upon receiving information, computer system 100 stores the information in memory 2 according to the data structures of the present invention. This allows the computer system 100 to read information from memory 2  
20    for use in the various system processes.

Each of the four system processes, Periodic Updating Process 4, Loan Monitoring Process 5, Performance Tracking & Reporting Process 6, and Illustration Process 7, generates reports reflecting its computations, data sorts, and data processing. To facilitate distribution of reports, the Plan Administrator 110 codes report distributions as to which system  
25    should receive which report. Accordingly, The Plan Administrator 110 electronically receives

and stores each reports and its system electronically re-sends a received report to a lender company 112, a plan fiduciary 114, a plan sponsor 116, a plan participant 118, and/or a brokerage firm 120, depending the report's coding.

FIG. 3 sets forth in columnar form various data input items received from the  
5 plan administrator 110 by the computer system 100.

FIG. 3A reflects in columnar form the participant data structure that transfers from the plan administrator 110 to the computer system 100. This information is first gather by the plan sponsor 116.

FIG. 3B reflects in columnar form the participant benefit plan attributes and  
10 limitations by participant. This information is received from plan administrator 110 by the computer system 100, after originating at the plan sponsor 116.

FIG. 3C reflects in columnar form the put contract data items used by computer system 100 in the loan monitoring process 5, the performance tracking and reporting process 6, and the illustration process 7. The put data originates from the brokerage firm 120, where the  
15 participant plan assets are held and is forwarded electronically to the plan administrator 110 for further transfer to memory 2.

FIG. 3D reflects in columnar form data items to permit the computer system 100 to prepare illustrations 30 of a benefit plan.

FIG. 3E reflects in columnar form data items for the computer system 100 to  
20 compute illustrations 30 of a stock option plan.

FIG. 4 is a block diagram of the periodic update process 4 portion of computer system 100. The steps in the system are designed to capture relevant benefit plan data and event data for each participant and timely record the information in memory 2.

FIG. 5 (collectively FIG's 5A-5C) is a block diagram of the loan monitoring  
25 process 5 portion of the computer system 100. The steps in the system are designed to

provide timely notices of loss of collateral value to the benefit plan parties of interest – the plan administrator 110, the lender company 112, the plan fiduciary 114, the plan sponsor 116, the plan participant 118 and the brokerage firm 120. Further, the loan monitoring process includes system steps to prevent loans that might violate Reg. U. and system steps to cause an immediate retirement of debt and accrued interest when minimum collateral percentages are breached. This loan monitoring process from block 500 to block 550 is a core element of the invention. This process permits benefit plans to use stock as collateral and not be subject to Reg. T margin calls. Further, the process assures the lender the non-recourse debt be retired systematically before the stock collateral becomes less than the loan amount.

FIG. 6 (collectively FIG's 6A-6K) is a block diagram of the performance tracking and reporting process 6. The steps of the system are designed to assure that the benefit plan completes its financial obligations on a timely basis and completes timely financial reporting to the respective benefit plan parties of interest. Timely report data is important for each party to manage its aspect of the benefit plan. The report data is generally required for inclusion in compliance reporting with the Internal Revenue Service, the Federal Reserve Bank, and the Depart of Labor (DOL). ( For example, the preparation of grantor income tax returns by the plan administrator 110 and plan fiduciary 114, the electronic preparation of Forms K-1s for plan participants 118, and Federal Reserve Bank reports for the lender company's Federal Reserve Bank Reg U compliance report.) Computer system 100 electronic preparation and delivery of reports assures low administrative costs, making the plan affordable. Further, the dependable exchange and availability of accurate report data assures confidence in the benefit plan.

FIG. 7 (collectively FIG's 7A-7D) is a block diagram of the illustration process 7. This module of the invention takes assumptions about a hypothetical benefit plan and projects the full range of plan financial performance over a user designated period of years. With computer system 100 projected illustrations, a user may assess participant benefits versus

sponsor costs, do sensitivity analysis with respect to different benefit plan variables, prepare cost/benefit analysis regarding the use of puts, and gain a better appreciation of the benefit of a participant paying capital tax versus ordinary income tax on appreciation of stock held in the plan. In addition, the illustration process 7 takes assumptions about a hypothetical nonqualified stock option (s/o) plan and prepares financial projections of performance similar to those prepared for a benefit plan. Finally the computer system 100 prepares a comparison of periodic cash flows, the group's NPV gains and simple accounting returns as well as the sponsor's total cost, book cost, and NPV of costs.

To summarize, one embodiment of the invention can be viewed as a computer apparatus or system, methods for making and using it, as well as necessary intermediates and products produced thereby. Focusing for the sake of brevity on the computer-implemented method in accordance with the foregoing, there can be a method for monitoring sufficiency of collateral for a loan to a participant's benefit plan. The method can be carried out comprising the steps of: receiving a valuation of collateral for a loan to a benefit plan, the loan at least partially funding acquisition of the collateral held by the benefit plan, the collateral including at least one security of a benefit plan sponsor; determining a balance of the loan to the benefit plan; and comparing the balance of the loan to the valuation of the collateral to monitor sufficiency of the collateral for compliance with a loan requirement permitted under the benefit plan.

In any embodiment, the method can be carried out by further including the step of signaling an incidence of noncompliance with the loan requirement.

In any embodiment, the method can be carried out by further including the step of computing an amount of the collateral to be sold to retire debt to comply with a loan requirement.

In any embodiment, the method can be carried out by further including the step of computing an amount of additional collateral required to comply with the loan requirement.

In any embodiment, the method can be carried out such that the step of comparing includes: computing the actual ratio of the loan amount divided by the value of the collateral; comparing an actual ratio to a test ratio; and signaling when the actual ratio equals or exceeds the test ratio.

In any embodiment, the method can be carried out such that the step of receiving a valuation of collateral is carried out with said at least one security including at least one equity security, a put contract for a equity security.

In any embodiment, the method can be carried out such that the step of comparing the balance of the loan to the valuation of the collateral to monitor sufficiency of the collateral for compliance with a loan requirement permitted under the benefit plan is carried out with the benefit plan being an ERISA benefit plan.

In an aspect of an embodiment of the invention, there can be a computer-implemented method for illustrating a participant's benefit plan financial performance. The method can include the steps of: receiving benefit plan data, the data including a valuation of collateral for a loan to the benefit plan, the loan related to the benefit plan by said loan at least partially funding acquisition of the collateral held by the benefit plan, the collateral including at least one security of a benefit plan sponsor, the loan having a balance sufficient for compliance with a loan requirement permitted under the benefit plan; and generating an illustration of said participant's benefit plan financial performance over time.

In any embodiment, the method can be carried out such that the step of generating an illustration includes at least one or more of the following sub-steps: computing a simple accounting rate for return said participant's benefit plan; computing the plan's internal

rate of return; computing the plan's present value gain or loss; computing the plan sponsor's GAAP cost; and computing the plan sponsor's present value cost.

5 In any embodiment, the method can be carried out including the step of transferring at least one financial performance item to at least one party with an interest in the benefit plan.

10 Considering another aspect of the invention, there can be a computer-implemented method of illustrating a comparison of at least one participant in a stock option plan to at least one participant in a participant's benefit plan. This method can include the steps of receiving financial performance data for a participant's benefit plan, the benefit plan having collateral for a loan to the benefit plan, the loan at least partially funding acquisition of the collateral held by the benefit plan, the collateral including at least one security of a plan benefit sponsor; receiving the financial performance data for a stock option plan; generating a comparison of the stock option plan and the benefit plan data; and computing at least one difference between said stock option plan and said benefit plan.

15 In any embodiment, the method can be carried out such that at least one of the steps is carried out with the benefit plan being an ERISA benefit plan, or in another embodiment, the benefit plan can be a non-ERISA benefit plan.

20 While a particular embodiment of the present invention has been disclosed, it is to be understood that various different modifications are possible and are within the true spirit of the invention. Accordingly, other computerized aspects of business processes can be modified in accordance with the present invention. The scope of the present invention is to be determined with reference to the claims set forth below, and there is no intention to limit the invention to the exact disclosure presented herein as a teaching of one embodiment of the invention.

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